

**REMARKS**

This paper is submitted in response to the Office Action dated October 21, 2003. A request for a one month extension of time has been submitted concurrently herewith, along with authorization to charge the appropriate fee of \$110.00 to Deposit Account 23-3000. Therefore, the period of response extends up to and includes February 23, 2003 (since February 21, 2003 is a Saturday). Reconsideration and allowance of all pending claims by the Examiner are respectfully requested.

In the subject Office Action, claims 1, 3-10, and 12-20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,201,438 to Duvvoori et al. in view of Microsoft Press Computer Dictionary.

Applicants respectfully traverse the Examiner's rejections to the extent that they are maintained. Applicants have now amended claims 1, 10, 18, and 19 to more expressly recite the concept of logical partitioning within the claims. Applicants respectfully submit that no new matter is being added by the above amendments, as the amendments are fully supported in the specification, drawings and claims as originally filed. In particular, with respect to the added concept of the allocation of hardware resources by a partition manager, the Examiner's attention is directed to page 3, lines 6-8 of the specification as filed.

As an initial matter, Applicants wish to thank the Examiner for the consideration extended in the telephonic interview conducted between the Examiner and Applicants' representative on January 22, 2004. In the interview, Applicants elaborated on the concept of logical partitioning, and proposed amendments to the claims to more expressly recite this concept.

Now turning to the subject Office Action, the Examiner initially disputes Applicants' contention that an operating system is inherently resident in a logical partition, and cites the Microsoft Press Computer Dictionary definition of a partition. As noted in the interview, however, the cited definition focuses on partitioning of a disk or

Page 7 of 14  
Serial No. 09/314,324  
Amendment and Response dated February 4, 2004  
Reply to Office Action of October 21, 2003  
IBM Docket RO999023  
WHE IBM/91  
K:\bmt91\Amendment and Response to 10-21-03 OA.wpd

other storage device, which is conceptually different from logical partitioning of a computer. The Examiner will also note that claim 1, which the Examiner argued did not require an operating system in each logical partition as the relevant recitation was merely in the preamble, has been amended to incorporate this recitation directly in the body of the claim.

As was further discussed in the interview, another aspect of logical partitioning involves the allocation of hardware resources in a logically-partitioned computer (e.g., processors, memory, input/output devices, etc.) to the various logical partitions by a partition manager. To further clarify this aspect of logical partitioning, claims 1, 10, 18, and 19 have each been amended to specifically recite that the partition manager is configured to allocate hardware resources to each of the plurality of logical partitions.

Of note, therefore, each of claims 1, 10, 18 and 19 now recite a partition manager that is capable of both (1) tracking concurrent uses of a computer program across a plurality of logical partitions, and (2) allocating hardware resources to each of the logical partitions.

*Duvvoori*, which is relied upon by the Examiner to reject the claims, fails to disclose or suggest, in combination with each of the other limitations of such claims, a partition manager capable of tracking concurrent uses of a computer program across multiple logical partitions, and allocating hardware resources to such logical partitions.

The Examiner appears to rely on the disclosure in *Duvvoori* regarding implementing license management for a 16-bit application running in a 32-bit Windows NT environment. However, the Examiner's reliance on this disclosure is deficient for at least two reasons. First, a virtual computer environment in Windows NT is not analogous to a logically-partitioned computer, so the parallels the Examiner draws between the two environments are inherently flawed. Second, even if such parallels were appropriate, claim 1 focuses on a specific delegation of responsibilities that has no like delegation in *Duvvoori*.

Page 8 of 14  
Serial No. 09/314,324  
Amendment and Response dated February 4, 2004  
Reply to Office Action of October 21, 2003  
IBM Docket RO999023  
WH&E IBM/91  
K:\bmt91\Amendment and Response to 10-21-03 OA.wpd

As to the Examiner's reliance on the virtual computer environments disclosed in *Duvvoori*, Applicants submit that these environments are not recognized as equivalents to a logically-partitioned environment. Logical partitioning is well recognized in the art as a separate concept from the emulation of a 16-bit environment in a 32-bit operating system.

As described at page 3 of the Application, logically-partitioned environments are characterized as relying on a shared partition manager that is accessible by multiple logical partitions that not only emulate virtual computers, but that also are allocated various resources in the underlying hardware platform (e.g., processors, memory, input/output devices, etc.). Also, the claims recite that each logical partition includes an operating system, which the Examiner has acknowledged that *Duvvoori* does not explicitly disclose.

The 16-bit environments disclosed in *Duvvoori* do teach the emulation of operating system functionality to enable a 16-bit application to execute in a 32-bit environment. Nevertheless, the additional characteristics of logical partitioning, most notably the use of a complete operating system in each logical partition, and the allocation of specific hardware resources to each logical partition, are not disclosed or suggested by *Duvvoori*.

Nor does the secondary reference, the Microsoft Press Computer Dictionary definition of emulator, rectify this shortcoming of *Duvvoori*. The cited passage is silent as to the provision of an operating system in a virtual computer (which the Examiner analogizes to a logical partition), or of allocating specific hardware resources to different virtual computers. As such, one of ordinary skill in the art would not look to the secondary reference to modify *Duvvoori* in the manner suggested by the Examiner.

Next, even using an interpretation of *Duvvoori* that is most favorable to the Examiner, and *assuming arguendo* that the Examiner's drawn analogies between the 16-bit environments of *Duvvoori* and logical partitioning are proper, *Duvvoori* still fails to suggest the combination of features recited in each independent claim. In particular, each

Page 9 of 14  
Serial No. 09/314,324  
Amendment and Response dated February 4, 2004  
Reply to Office Action of October 21, 2003  
IBM Docket RO999023  
WH&E IBM/91  
K:\ibm\91\Amendment and Response to 10-21-03 OA.wpd

claim recites a specific delegation of responsibilities between a partition manager and a license manager resident in a logical partition. This specific delegation of responsibilities is neither disclosed nor suggested by *Duvvoori* or the Microsoft Press Computer Dictionary definition of emulator.

With respect to claim 1, for example, *Duvvoori* does not disclose or suggest "tracking concurrent uses of a computer program . . . using a partition manager [that is] configured to allocate hardware resources in the logically partitioned computer to each of the plurality of logical partitions." *Duvvoori* is instead directed to managing licenses for multiple computers in a distributed fashion, using a centralized license restriction management process running on a file server coupled to a network (See Fig. 1). It is the license restriction management process that the Examiner considers to track concurrent uses of a computer program. Notably, however, this process is executed in a separate computer from any computer upon which a licensed program is executing. As such, if the Examiner considers the management process to correspond to a partition manager, this process is not executing on a "logically partitioned computer" even using the Examiner's chosen terminology. Moreover, there is no disclosure or suggestion in *Duvvoori* that the file server, nor any of the other computers described or illustrated in the reference are logically-partitioned computers. Given the lack of any disclosure of logical partitioning, it is not surprising that *Duvvoori* lacks any disclosure of a partition manager, much less a partition manager that tracks concurrent uses of a computer program.

Second, *Duvvoori* does not disclose or suggest "with a license manager resident in a first logical partition . . . accessing the partition manager in response to a request to use [a] computer program", as is also required by claim 1. As noted above, *Duvvoori* does not disclose or suggest the concept of logical partitioning. Moreover, even if a 16-bit environment in *Duvvoori* is considered to be analogous to a logical partition, there is no license manager resident in such an environment that accesses a partition manager in response to a request to use a computer program.

Page 10 of 14  
Serial No. 09/314,324  
Amendment and Response dated February 4, 2004  
Reply to Office Action of October 21, 2003  
IBM Docket RO999023  
WH&E IBM/91  
K:\bmt91\Amendment and Response to 10-21-03 OA.wpd

Instead, *Duvvoori* discloses agents that are resident in each 16-bit environment. In the preferred embodiment, and as illustrated in Figs. 4B-4C and described in col. 16, line 46 to col. 17, line 53, these agents respond to requests from a 32-bit agent running outside of the environment and provide back a list of all 16-bit applications that are running in the environment. The 32-bit agent then provides the list to the license restriction management process on the file server, which then determines whether any of the applications are in violation of the license terms, and if so, sends a denial message to the 32-bit agent. The 32-bit agent then sends requests to the 16-bit agent to terminate any violating applications.

Of note, the 16-bit agents are not permitted to communicate directly with the license restriction management process that tracks the concurrent uses (col. 16, lines 38-41), and as such, such agents do not perform any functions analogous to "accessing [a] partition manager", as required by claim 1.

*Duvvoori* does disclose that in alternative embodiments, and in prior art agents, communication between a 16-bit agent and a license restriction management process was permitted (col. 16, lines 41-43, *see also* col. 4, lines 5-14, and col. 18, lines 41-47). However, of note, none of these agents ever access the process "in response to a request to use [a] computer program", as is also required by claim 1. In particular, with respect to the allegedly inventive agents, these agents are described as being capable of terminating an application in response to a request from a license restriction management process, and after supplying a list of currently running applications (col. 18, lines 41-47). Likewise, the prior art agents described at col. 4, lines 5-14 are described as detecting running applications. Thus, the agents in *Duvvoori* all appear to operate on applications that have already been started, by selectively terminating those applications when appropriate. Thus, *Duvvoori* does not disclose or suggest an agent that specifically accesses a license restriction management process "in response to a request to use [a] computer program".

Page 11 of 14  
Serial No. 09/314,324  
Amendment and Response dated February 4, 2004  
Reply to Office Action of October 21, 2003  
IBM Docket RO999023  
WH&E IBM/91  
K:\ibm\91\Amendment and Response to 10-21-03 OA.wpd

Third, *Duvvori* does not disclose or suggest "with a license manager resident in a first logical partition . . . selectively denying [a request to use a computer program] if permitting the requested use would violate a concurrent use software license.", as is also required by claim 1. As noted above, none of the agents resident in a 16-bit environment is capable of denying or granting a request to use a computer program. Instead, this functionality is allocated to the license restriction management process, which not only does not execute in the 16-bit environment, but in fact executes on an entirely different computer (col. 6, line 49 to col. 7, line 54). In no embodiment of *Duvvori* is an agent running in a 16-bit environment ever configured to actively deny or grant a request to use a licensed program.

In short, *Duvvori* does not disclose or suggest a single computer upon which (1) a program analogous to a partition manager allocates resources to logical partitions and tracks concurrent uses of a licensed program, and (2) another program analogous to a license manager resides within a logical partition (or other virtual environment) on the same computer that both accesses the partition manager in response to a request to use the licensed program, and selectively denies the request if doing so would violate a software license. Instead, in *Duvvori* the tracking of concurrent uses, as well as the selective denial of a request to use a program are performed, if at all, by a license restriction management process that is resident on a different computer from that which a licensed program is being executed.

The Microsoft Press Computer Dictionary definition of emulator, which is cited merely for its alleged relevance to the concept of logical partitioning, fails to address any of the shortcomings of *Duvvori* in this regard. As such, Applicants respectfully submit that claim 1 is novel and non-obvious over *Duvvori* and the Microsoft Press Computer Dictionary definition of emulator. Reconsideration and allowance of claim 1, and of claims 3-9 which depend therefrom, are respectfully requested.

Page 12 of 14  
Serial No. 09/314,324  
Amendment and Response dated February 4, 2004  
Reply to Office Action of October 21, 2003  
IBM Docket RO999023  
WH&E IBM/91  
K:\bro\91\Amendment and Response to 10-21-03 OA.wpd

Next, with respect to independent claims 10, 18 and 19, each of these claims recites the combination of (1) a partition manager configured to track concurrent uses of a licensed program across multiple logical partitions and allocate resources to such logical partitions, and (2) a license manager resident in a logical partition and configured to access the partition manager in response to a request to use the licensed program.

As discussed above in connection with claim 1, however, the combination of *Duvvoori* and the Microsoft Press Computer Dictionary definition of emulator does not disclose or suggest a logically partitioned computer incorporating the aforementioned functionality. Therefore, for the reasons presented for claim 1, Applicants respectfully submit that claims 10, 18 and 19 are non-obvious over the combination of *Duvvoori* and the Microsoft Press Computer Dictionary definition of emulator. Reconsideration and allowance of claims 10, 18 and 19, and of claims 12-17 and 20 which depend therefrom, are respectfully requested.

Finally, with respect to the dependent claims, Applicants traverse the Examiner's rejections on the basis of dependency of these claims on the aforementioned independent claims. However, the Examiner's attention is directed to Applicants' earlier filed Appeal Brief for additional arguments for patentability, particularly with regard to claims 8 and 13, which have not been rebutted by the Examiner, and which are not overcome by the additional citation of the Microsoft Press Computer Dictionary. In the interests of prosecutorial economy, such arguments will not be repeated herein.

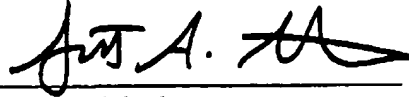
In summary, Applicants respectfully submit that all pending claims are novel and non-obvious over the prior art of record. Reconsideration and allowance of all pending claims are therefore respectfully requested. If the Examiner has any questions regarding the foregoing, or which might otherwise further this case onto allowance, the Examiner may contact the undersigned at (513) 241-2324. Moreover, if any other charges or credits

Page 13 of 14  
Serial No. 09/314,324  
Amendment and Response dated February 4, 2004  
Reply to Office Action of October 21, 2003  
IBM Docket RO999023  
WH&E IBM/91  
K:\bmt91\Amendment and Response to 10-21-03 OA.wpd

are necessary to complete this communication, please apply them to Deposit Account 23-3000.

4 FEB 2004  
Date

Respectfully submitted,



Scott A. Stinebruner  
Reg. No. 38,323  
WOOD, HERRON & EVANS, L.L.P.  
2700 Carew Tower  
441 Vine Street  
Cincinnati, Ohio 45202  
Telephone: (513) 241-2324  
Facsimile: (513) 241-6234